FILTER DRIVEN DC-FREE CODE

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001]   This application is a continuation-in-part of U.S. non-provisional application No. 10/155,777, filed May 24, 2002 which *, is now a U.S. Patent 6,917,313,* claims the benefit of the filing date of U.S. provisional applications No. 60/349895 filed January 16, 2002, and No. 60/352776 filed January 28, 2002, the content of each of which is herein incorporated by reference in its entirety.

TECHNICAL FIELD

[0002]   This invention relates to block coding for communication signals.

BACKGROUND

[0003]   Communication systems generally employ modulation coding to convert data bits into symbols that are optimized for transmission through the communication channel. Modulation coding can be used to ensure the presence of sufficient information for timing recovery, gain control, and adaptive equalization. Some communication channels such as perpendicular recording channels may inherently include a DC component in the read back signal. The DC component may complicate and degrade the decoding of the signal requiring tracking of the DC offset. In some cases, the performance of DC offset tracking circuits